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SUGHRUE MION, PLLC				
2100 PENNSYLVANIA AVENUE, N.W.				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,843

Applicant(s)

DREVN ET AL.

Examiner

BETTY LEE

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 10-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 10-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings were received on January 17, 2008. These drawings are acceptable.

Claim Objections

2. Claims **21, 24, 26, 28, 30, 32 and 34** are objected to because of the following informalities:

Claim 21 line 3 recites "Radio link set-up request ". It is suggested that the quotation marks surrounding Radio link set-up request be removed since they cast doubt on the limitation being claimed.

Claims 24, 28, and 32 have the same issue.

Claims 26, 30, and 34 are objected to as being dependent on a objected base claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims **20-26** are rejected under 35 U.S.C. 112, first paragraph, as being single means claims, the network element being the single means. The breadth of the claims is not supported by the specifications.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims **20-26** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim **20** recites the limitation "the controlling radio network controller" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim **23** recites the limitation "the serving radio network controller" in line 6 and "the drift radio network controller" in lines 7 and 8. There is insufficient antecedent basis for this limitation in the claim.

Claims **21, 22, and 24-26** are rejected as being dependent on a rejected base claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims **1-4, 6, 10-14, and 16** are rejected under 35 U.S.C. 102(e) as being anticipated by Kekki (US 2003/0161325).

Regarding claim 1, Kekki teaches a first network element signals to a second network element by means of the radio network layer signaling protocol at least one parameter representative of transport quality of service or of quality of service for the transport network layer (see paragraph 45 lines 1-14), and a second network element uses said at least one parameter for transport quality of service management (see paragraph 44 lines 1-6) for uplink transmission over an Iub interface between a controlling radio network controller and a Node B, or for uplink transmission over an Iur interface between a serving radio network controller and a drift radio network controller and/or downlink transmission over an Iub interface between a drift radio network controller and a Node B (see paragraph 45 lines 1-11).

Regarding claim 2, Kekki further teaches the first network element is a controlling network controller (see Fig. 1 Box 7).

Regarding claim 3, Kekki further teaches the second network element is a Node B or a base station (see Fig. 1 Box 6).

Regarding claim 4, Kekki further teaches the radio network layer signaling protocol is a Node B Application Part protocol applicable to the Iub interface between the controlling network controller and the Node B (see paragraph 45 line 9).

Regarding claim 6, Kekki further teaches a serving radio network controller (see Fig. 1 Box 17).

Regarding claim 10, Kekki further teaches the at least one parameter representative of transport quality of service is a specific parameter intended to indicate a transport quality of service level (see paragraph 45 lines 1-7).

Regarding claim 11, Kekki further teaches the at least one parameter representative of transport quality of service is at least one radio access bearer parameter (see paragraph 40 lines 4-6).

Regarding claim 12, Kekki further teaches the at least one radio access bearer parameter is the transfer delay (see paragraph 38 lines 1-5).

Regarding claim 13, Kekki further teaches the at least one radio access bearer parameter is the traffic handling priority (see paragraph 40 lines 4-10).

Regarding claim 14, Kekki further teaches the at least one radio access bearer parameter is the traffic class (see paragraph 45 lines 1-6).

Regarding claim 16, Kekki further teaches the at least one parameter representative of transport quality of service is at least one parameter that may be associated with a transport quality of service level or at least one radio access bearer parameter (see paragraph 40 lines 4-6 and paragraph 45 lines 1-6).

9. Claims **7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kekki (US 2003/0161325) in view of Verma et al. (US 2005/0210154).

Regarding claim 7, Kekki teaches all the subject matter of the claimed invention with the exception of a drift radio network controller. However, Verma teaches a drift radio network controller (see paragraph 27 line 5). Thus, it would have been obvious to one of ordinary skill to use the system of Verma in the system of Kekki. The motivation for doing so is to increase the reliability of the system by continuing communications when the mobile drifts.

Regarding claim 8, Kekki further teaches the radio network layer signaling protocol is a RNSAP signaling protocol applicable to the Iur interface between radio network controllers (see paragraph 45 lines 7-11). Kekki teaches all the subject matter of the claimed invention with the exception of a drift radio network controller. However, Verma teaches a drift radio network controller (see paragraph 27 line 5). Thus, it would have been obvious to one of ordinary skill to use the system of Verma in the system of Kekki. The motivation for doing so is to increase the reliability of the system by continuing communications when the mobile drifts.

10. Claims **20-22 and 31-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren et al. (US 6,374,112) in view of Kekki (US 2003/0161325).

Regarding claims 20-22 and 31-34, Widegren teaches a radio network controller CRNC comprising means for signaling to a Node B in accordance with a signaling protocol of a radio network layer at least one parameter representing the quality of service for the transport network layer (see col. 8 line 55 - col. 9 line 4), for uplink transmission over the Iub interface between the radio network controller CRNC

and the Node B (see col. 11 line 52 - col. 12 line 11 and col. 12 lines 33-45; The MSC determines the uplink and downlink QoS required for the call and sets up a radio access bearer to mobile station via the RNC. The RNC receives the setup request from the MSC and sets up the bearer between the RNC and Node B based on QoS.). Widegren does not explicitly disclose the signaling protocol used between the RNC and Node B to be the NBAP protocol.

However, Kekki does teach the NBAP protocol is used to signal the QoS, which includes a parameter to indicate a transport QoS level (see paragraph 45) in the NBAP radio link setup request message (see paragraph 40; The NBAP Radio Link setup request message is used to request a bearer and to signal the QoS of the bearer.). Thus, it would have been obvious to one of ordinary skill in the art to use the NBAP protocol in the manner taught by Kekki in the system of Widegren. The motivation for doing so is to follow the industry standards.

11. Claims **23-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2002/0082020) in view of Willars et al. (US 6,889,050).

Regarding claim 23-30, Lee teaches a radio network controller SRNC comprising means for signaling to a radio network controller DRNC by means of a signaling protocol of a radio network layer corresponding to the RNSAP applicable to the lur interface between radio network controller SRNC and radio network controller DRNC, where the signaling is a radio link setup message (see paragraph 153; The radio link between the SRNC and DRNC is setup using an RNSAP message, and the

radio link between the DRNC and the Node B is setup using a NBAP message.). Lee teaches all the subject matter of the claimed invention with the exception of including the QoS of the link in the setup messages.

However, Willars teaches signaling at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iur interface between the serving radio network controller SRNC and the drift radio network controller DRNC and a Node B, wherein the parameter indicates a transport QoS level (see col. 9 lines 25-35 and col. 11 lines 24-50).

Response to Arguments

12. Applicant's arguments filed January 17, 2008 have been fully considered but they are not persuasive.

Applicant noted that Verma has an effective filing date of May 30, 2003 (see page 15 line 5 of Remarks). However, Examiner would like to point out that Verma claims priority to provisional application no. 60/386,638 filed on June 6, 2002, which precedes the effective filing date of January 31, 2003 of the instant application.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BETTY LEE whose telephone number is (571)270-1412. The examiner can normally be reached on Monday-Thursday 9-5 EST and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Betty Lee
Examiner, Art Unit 2619

/Hassan Kizou/
Supervisory Patent Examiner, Art Unit 2619